Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method ~~of producing a sintered body of yttrium-aluminum garnet from~~ comprising the step of sintering a mixture comprising a source compound for yttrium, ~~and~~ a source compound for aluminum, ~~using~~ and aluminum nitride ~~as a sintering aid~~to produce a sintered body of yttrium-aluminum garnet.

2. (Original) The method of claim 1, wherein said source compound for yttrium comprises yttria and said source compound for aluminum comprises alumina.

3. (Original) The method of claim 1, wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.59 to 0.62 contained in said source compound for yttrium and said source compound for aluminum.

4. (Original) The method of claim 1, wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.59 to 0.62 contained in said source compound for yttrium, said source compound for aluminum and aluminum nitride.

5. (Original) The method of claim 1, wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.61 to 0.63 contained in said source compound for yttrium and said source compound for aluminum, and wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.59 to 0.62 contained in said source compound for yttrium, said source compound for aluminum and aluminum nitride.

6. (Original) The method of claim 1, wherein aluminum nitride is not substantially present in said sintered body of yttrium-aluminum garnet.

7. (Original) The method of claim 1, wherein said sintered body of yttrium-aluminum garnet comprises AlON phase.

8. (Currently Amended) The method of claim 1, ~~comprising~~ wherein the step of sintering is under a reducing atmosphere containing nitrogen in a ratio of 10 percent or higher and 60 percent or lower.

9. (Currently Amended) The method of claim 1, ~~comprising~~ wherein the step of sintering is under an atmosphere having a dew point of -10°C or higher and +10°C or lower.

10. (Currently Amended) The method of claim 1, further comprising the steps of:

~~dewaxing~~ forming a shaped body comprising said source compound for yttrium, said source compound of aluminum and aluminum nitride, and dewaxing the shaped body at a temperature of 800°C to 1300°C to obtain a dewaxed body; and

sintering said dewaxed body to obtain ~~a~~ the sintered body.

11. (Canceled)

12. (Currently Amended) A ~~sintering aid used for producing~~ shaped body for a sintered body of yttrium-aluminum garnet ~~from a source compound for yttrium and a source compound for aluminum said~~, said shaped body comprising a sintering aid comprising aluminum nitride.

13. (New) The shaped body of claim 12, further comprising a source compound for yttrium and a source compound for aluminum.

14. (New) The shaped body of claims 12, further comprising yttrium-aluminum garnet.

15. (New) A method comprising:

mixing a source compound for yttrium and a source compound for aluminum to produce a mixture;

calcining the mixture to generate yttrium-aluminum garnet;

introducing aluminum nitride to the yttrium-aluminum garnet; and

sintering the mixture of the aluminum nitride and yttrium-aluminum garnet to produce a sintered body of yttrium-aluminum garnet.

16. (New) The method of claim 15, wherein said source compound for yttrium comprises yttria and said source compound for aluminum comprises alumina.

17. (New) The method of claim 15, wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.59 to 0.62 contained in said source compound for yttrium and said source compound for aluminum.

18. (New) The method of claim 15, wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.59 to 0.62 contained in said source compound for yttrium, said source compound for aluminum and aluminum nitride.

19. (New) The method of claim 15, wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.61 to 0.63 contained in said source compound for yttrium and said source compound for aluminum, and wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.59 to 0.62 contained in said source compound for yttrium, said source compound for aluminum and aluminum nitride.

20. (New) The method of claim 15, wherein aluminum nitride is not substantially present in said sintered body of yttrium-aluminum garnet.

21. (New) The method of claim 15, wherein said sintered body of yttrium-aluminum garnet comprises AlON phase.

22. (New) The method of claim 15, wherein the step of sintering is under a reducing atmosphere containing nitrogen in a ratio of 10 percent or higher and 60 percent or lower.

23. (New) The method of claim 15, wherein the step of sintering is under an atmosphere having a dew point of -10°C or higher and +10°C or lower.

24. (New) The method of claim 15, further comprising the steps of:

forming a shaped body comprising said mixture of aluminum nitride and yttrium-aluminum garnet, and dewaxing the shaped body before the sintering.